Assessing and Maintaining a Safety Culture

September 19, 2013

1-2:30 p.m. (EDT)

Presenters

- **Earl Carnes**, Senior Advisor, High Reliability, U.S. Department of Energy (DOE)
- **Rizwan Shah,** Organizational Culture Program Advisor, U.S. DOE
- **Dr. Tracy Dillinger**, Manager, Safety Culture, NASA Headquarters
- **Diane Sieracki**, Senior Safety Culture Program Manager, Office of Enforcement, U.S. Nuclear Regulatory Commission (NRC)
- **Jody Hudson**, Deputy Chief Human Capital Officer, U.S. NRC
- **Captain Jody Bridges**, Director, School of Aviation Safety, U.S. Naval Safety Center

Summary

Facilitator: Mike Lipka, Knowledge Officer, NASA Safety Center

Attendees: 85 (approximately)

Purpose of the Safety and Health Learning Alliance: Share experiences and collaborate ideas across various government and defense agencies, related industries, and professional organizations for the mutual goal of achieving high levels of safety and health.

Goal: Increase involvement, communication, and participation among safety and health professionals.

The SHLA website includes a video of the presentation. Please submit questions, comments, and event recommendations on the website or by emailing NASA-NSC@nasa.gov.

Questions

Round 1: Assessing Your Safety Culture

- How long has your organization been assessing safety culture?
- Do you use a survey? Interviews? Other?
- How do you publish your results?
- How do you define a good safety culture

Carnes

We have been assessing safety culture for 6 years. Some are self-assessments per Nuclear Regulatory methods. The framework is in high reliability with 17 organizational behaviors that exemplify success. Functional analyses

are used to describe the organization itself with workplace observations, focus groups, surveys and multiple methodologies to broaden and target successes for thousands of employees.

Surveys are taken online before the site audit. A PhD psychologist analyzes the collected results after spending 5-14 days in the field, depending on the population of the field. Approximately 10-15 percent of the population is surveyed, equating to several hundred people.

Dillinger

NASA began agency-wide assessments in 2009, and then conducted a follow-up to the initial benchmarks in 2012. NASA conducted interviews and completed center surveys, which varied from center to center.

The definition of safety culture is embedded into NASA standards and defines what we are looking for: values, organization, individual levels and processes in the organization. Centers conduct surveys every quarter, which take employees 5-7 minutes to complete.

Sieracki

We conduct agency-wide survey and/or focus group interviews. The results are shared with the offices and used to create an agency-wide action plan. Each program office also creates an action plan by applying a holistic approach for a lot of involvement.

Hudson

Evaluations have been conducted by a third party about every 3 years since 1998. Benchmarks were developed using about 130 different questions. We use an international survey that takes about 3-4 weeks to conduct with a workforce of approximately 4,000 people and achieve about 80-85 percent participation. We compare benchmarks to research and development facilities, other high performing organizations and industry norms. We utilize three different benchmarks to prepare surveys, and then collect and analyze data by comparing it to similar organizations and agencies to look for trends and areas to focus improvements. An Office of Personnel Management (OPM) survey also is utilized. Usually, we rank number one in the federal government and lately, ranked number three for quality of the workplace.

Bridges

The Commanding Officers (COs) drive the climate. We look at behavioral norms for climate and culture from decades of developing culture assessments. We contract out to job of conducting online surveys to assess climate (how they feel about organization). This is required every time there is a change of command, about every 18 months. The CO can see the results to self-evaluate how effectively he or she is performing. Reassessments are conducted 9 months later to assess changes made based on the results of the first survey.

Culture workshops are not only for safety, but for leadership and integrity throughout the chain of command. Safety is considered a by-product of cultural excellence.

An audit team evaluates behaviors in the field while observing risk management. Training for Risk Management is provided. Results are published and presented to the CO and used for trending data.

Climate—How we do things and how things feel (i.e., harsh like a hot desert or good like a temperate climate).

Culture—Behavior norms such as the way we do things.

Climate can change culture. Climate drives culture.

Round 2: Gaining Executive Support

➢ **How do you help your leadership understand and support the benefits of a strong safety culture?**
➢ **What are some ways the leadership in your organization embodies the safety culture?**
➢ **Who "walks the walk" and how do they do it?**

Carnes

It is hard to keep on message with political leaders changing. Line leadership is very important to set climate and expectations.

Efforts are made to engage our partners and contractors in group discussions about safety culture and to create a cooperative partnership in making improvements. The Safety Board emphasizes culture. We apply multiple approaches, both informal and formal, to engage leaders and to continue striving to make improvements.

Dillinger

There is strong support at NASA including senior leadership. They are constantly inquiring and always responsive. Safety is a core value at NASA and training and safety culture is emphasized.

Sieracki

Leaders strongly endorse voicing concerns. We have an open door policy and staff members are encouraged to participate and to voice issues. Monthly meetings are held to keep lines of communication open. This is not a metric driven organization.

Hudson

Safety is embedded in our mission statement. We strongly promote participation in surveys throughout the management line and let employees know their comments are important and need to be heard.

Bridges

Aviation Safety Command is very active. We require several days of training including ethics. Concept of Privilege assures we recognize causal factors and we will investigate all mishaps, near-misses and accidents. CO understands that safety success influences mission readiness and combat effectiveness.

Safety policy and vision are lived every day (walking the walk). Risk Management is effective and staff must know when to say no. They will walk the walk.

Round 3: Employee Engagement

➢ **How does your organization ensure employee safety culture buy-in and participation?**
➢ **What safety recognition program does your organization use?**
➢ **Describe how your organization develops a "just culture."**

Carnes

There is a distinction between employees (approximately 150,000) in a variety of expertise. (See Rizwan Shah's comments.) Context and safety culture emphasize worker safety.

We utilize our Internet Safety Management System, which has the longest history, about 17 years, as an integrated approach to highlight an effective safety culture.

Shah

We assure inclusion of both worker safety and system safety and understand the differences throughout worker and leadership levels.

Workers understand that safety is working for them by utilizing control measures to protect their lives. Buy in from leadership influences the culture and shows support by enforcement of control measures that protect workers.

Also, we reduce the fear of learning and the fear of change. We develop a just culture and are more transparent as to why we do what we do. Feedback loop is important and is too often forgotten.

Dillinger

We encourage reporting of concerns at centers and through HQ and this can be done anonymously.

There are several recognition programs throughout the agency. We encourage all personnel to speak up about safety, not just safety personnel.

Sieracki

Recognition is given through a Team Player Award. Anyone can be nominated and anyone can nominate in recognition of any kind of positive safety culture behavior.

Performance Management system is used to assess management and how they are doing with the open-door policy. We support raising issues and "judging" management, but with a "no blame policy."

Hudson

Each employee is appreciated and understands his or her engagement is important. We monitor employee engagement through surveys then evaluate the demographics and different perspectives. Are the problems internal? What are the best practices and how can we use these broadly?

Bridges

It takes effort to obtain buy in such as, proactive determination, safety promotion and awareness.

Aviation officers are trained in aviation safety and are held accountable to the CO.

The organization's just culture offers encouragement to come forward and discuss mistakes. Acceptable and unacceptable mistakes considered, hazards identified and corrections made.

"Cowbell" is the constant ringing to maintain awareness. EDIMOUSE report can be done anonymously.

Human factors hazards are always considered and taken seriously.

Round 4: Training and Development

➢ **What are the key components of your safety training?**
➢ **What have been the results of your safety training? Is it working for your organization?**
➢ **What part of your training program has made the biggest impact on your safety culture?**

Carnes

We recognize the importance of the many years of in-depth experience and safety training our workers possess. We conduct hazard-specific training along with task-specific. There is craftsmen, administrative and SES level training. We work closely with local community emergency forces and participate in regional safety fairs for additional training opportunities.

Dillinger

We include peer reviews for safety evaluations. Our STEP program is used for training of safety and mission assurance professionals. It includes employee and supervisor courses for safety culture using an online e-learning program called SATERN to provide courses on-demand. Credit is given to participants who take these courses.

Sieracki

Informal training also has an impact on safety culture.

Hudson

We have safety cards that are job specific at all levels and qualification training directly related to safety tasks. We conduct safety training during on-boarding for all employees. Education is important to the mission, as is culture. A supervisor course, NRC Culture of Values and other specialized courses are needed.

Bridges

Aviation Safety Officers are aviators with 23 days of training for hazard identification, risk management, investigations and reporting. Training and education tools are applied, stressing how to conduct a proper investigation and create the report. It includes the importance of casual factors identification and recommendations. There also is training for investigating near-misses and accidents to maintain awareness as well as Sailors and Marines ORM Training, Resource Management Training and core education in 8 disciplines.

There is no concern about blame when going up the chain of command. We focus on looking at why and being proactive about corrections to prevent future accidents.

Round 5: On the Horizon in Your Organization

➢ **What are some anticipated changes for safety culture in your organization over the next 6-12 months?**
➢ **What is on your safety culture wish list?**

Carnes

We are currently going through self-assessments and hope to learn from these. We develop a strategy-based approach to make improvements instead of product-based. We are trying to improve safety awareness factors and therefore safety culture influences, and provide leadership training in these areas.

WISH: To see safety programs become a part of on-boarding processes in the agency.

Dillinger

In the next few months, our website should be done. It is important for safety culture language to be part of NASA requirements. We are focusing on a Safety Culture Handbook. Organizational Safety Assessment is new to NASA. The priority will be Human Space Flight programs.

WISH: Continued support from upper-management and integration into projects, departments and divisions.

Sieracki

Recently, we developed agency-wide action plans and hope these will make a positive difference. We plan to become more involved in high reliability training.

Wish: For the topic of safety culture to reach all.

Bridges

There will be operational SMS throughout the fleets. We will streamline approaches and best practices.

Wish: More risk management training at the induction level. Also, inclusion of case studies to reinforce learning going forward. Get Crew Resource Management (CRM) into the aircraft work.

Final Key Points from Panelists

➢ **If people were to remember one thing about safety culture, it should be _____.**

Carnes

High reliability.

Shah

Sustainable.

Dillinger

Everybody had a part to play.

Sieracki

It is never ending.

Hudson

Safety first.

Bridges

Leadership.